AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 09/989,662
Attorney Docket No.: Q67377

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A mobile communication control method in which a mobile station transmits data using at least one currently transmitting base station and also sets a link with base stations forming an active set of base stations, comprising:

measuring a received signal quality of a pilot signal transmitted from each of said active set of base stations; and

determining at least one transmitting base station from among the active set of base stations in accordance with the measured results,

wherein said determining further comprises enabling for transmission all of the active set base stations depending on a state of transmission power value from said at least one currently transmitting base station.

2. (previously presented): The mobile communication control method according to claim 1, further comprising:

transmitting a dedicated control signal to said mobile station from said active set of base stations;

transmitting a dedicated data signal to said mobile station from said at least one currently transmitting base station; and

estimating a transmission power value of the dedicated control signal transmitted by said active set of base stations, and

making each of the active set of base stations a transmitting base station when an estimated value of the transmission power value of the dedicated control signal transmitted by the active set of base stations other than said at least one currently transmitting base station is greater than or equal to a predetermined threshold value for the estimated value of transmission power value of the dedicated control signal transmitted by said at least one currently transmitting base station.

3. (previously presented): The mobile communication control method according to claim 1, further comprising:

transmitting a dedicated data signal to said mobile station from said at least one currently transmitting base station; and

estimating a transmission power value of the dedicated data signal transmitted by said at least one currently transmitting base station, and

making each of the active set of base stations a transmitting base station when a difference between an estimated value of the transmission power value of said at least one currently transmitting base station and a predetermined maximum transmission power value of base station is smaller than or equal to a predetermined threshold value.

4. (original): The mobile communication control method according to claim 2, further comprising a step of measuring the received powers of a common pilot signal that said active set base station transmits at a predetermined power value and said dedicated control signal or said dedicated data signal transmitted at a power value under the transmission power control in said mobile station, and estimating a power value of said dedicated control signal or said dedicated data signal from a difference between the received power of said common pilot signal and the received power of said dedicated control signal or said dedicated data signal.

5. (previously presented): The mobile communication method according to claim 1, further comprising: measuring the received signal quality of the dedicated data signal transmitted from said at least one currently transmitting base station in said mobile station, and making all of the active set base stations a transmitting base station when the received signal quality is less than a predetermined signal quality even if said at least one currently transmitting base station makes the transmission at the predetermined maximum transmission power value.

6. (previously presented): A mobile communication system comprising:

a mobile station;

at least one currently transmitting base station transmitting data to and from the mobile station; and

base stations with which the mobile station sets a link, forming an active set of base stations,

wherein the mobile station measures a received signal quality of a pilot signal transmitted from each of said base stations, determines at least one transmitting base station from the active set of base stations in accordance with the measured results, and

wherein the determining of the at least one transmitting base comprises enabled for transmission all of the active set of base stations depending on a state of transmission power value from said at least one currently transmitting base station.

7. (previously presented): The mobile communication system according to claim 6, wherein said active set of base stations transmits a dedicated control signal to said mobile station, said at least one currently transmitting base station transmits a dedicated data signal and the dedicated control signal, and said mobile station estimates a transmission power value of the dedicated control signal transmitted by said active set of base stations, wherein each base station from the active set of base stations are enabled for transmission when an estimated value of the transmission power value of the dedicated control signal transmitted by the active set of base stations other than said at least one currently transmitting base station is greater than or equal to a predetermined threshold value for the estimated value of transmission power value of the dedicated control signal transmitted by said at least one currently transmitting base station.

8. (previously presented): The mobile communication system according to claim 6,

wherein said at least one currently transmitting base station transmits a dedicated data signal to said mobile station, and said mobile station estimates a transmission power value of the dedicated data signal transmitted by said at least one currently transmitting base station, and

wherein each base station of the active set of base stations is enabled for transmission, if a difference between an estimated value of the transmission power value of said at least one currently transmitting base station and a predetermined maximum transmission power value of base station is smaller than or equal to a predetermined threshold value.

9. (original): The mobile communication system according to claim 7,

wherein said mobile station measures the received powers of a common pilot signal that said active set base station transmits at a predetermined power value and said dedicated control signal or said dedicated data signal transmitted at a power value under the transmission power control, and estimates a power value of said dedicated control signal or said dedicated data signal from a difference between the received power of said common pilot signal and the received power of said dedicated control signal or said dedicated data signal.

10. (previously presented): The mobile communication system according to claim 6,

wherein said mobile station measures the received signal quality of a signal transmitted from said at least one currently transmitting base station, and

all of the active set of base stations are enabled for transmission when the received signal quality is less than a predetermined signal quality even if said at least one currently transmitting base station makes the transmission at a predetermined maximum transmission power value.

11. (previously presented): A mobile station which transmits data using at least one currently transmitting base station and which sets a link with base stations forming an active set of base stations, comprising:

means for measuring received signal quality of a pilot signal transmitted from said base stations; and

means for determining at least one transmitting base station from the active set of base stations in accordance with the measured results,

wherein said determining at least one transmitting base station further comprises enabling for transmission each base station from the active set of base stations depending on a state of transmission power value of said at least one currently transmitting base station.

12. (previously presented): The mobile station according to claim 11,

wherein said mobile station estimates a transmission power value of the dedicated control signal transmitted by said active set of base stations, and notifies that all base stations of the active set of base stations are enabled for transmission when an estimated value of the transmission power value of said dedicated control signal transmitted by the active set of base stations other than said at least one currently transmitting base station is greater than or equal to a

predetermined threshold value for the estimated value of transmission power value of the dedicated control signal transmitted by said at least one currently transmitting base station.

13. (previously presented): The mobile station according to claim 11,

wherein said mobile stations estimates a transmission power value of the dedicated data signal transmitted by said at least one currently transmitting base station, and notifies that each base station from the active set of base stations are enabled for transmission when a difference between an estimated value of the transmission power value of said at least one currently transmitting base station and predetermined maximum transmission power value of base station is smaller than or equal to a predetermined threshold value.

14. (original): The mobile station according to claim 12,

wherein said mobile station measures the received powers of a common pilot signal that said active set base station transmits at a predetermined power value and said dedicated control signal or said dedicated data signal transmitted at a power value under the transmission power control, and estimates a power value of said dedicated control signal or said dedicated data signal from a difference between the received power of said pilot signal and the received power of said dedicated control signal or said dedicated data signal.

15. (previously presented): The mobile station according to claim 11,

wherein said mobile station measures the received signal quality of a signal transmitted from said at least one currently transmitting base station, and notifies that all of the active set base stations are enabled for transmission when the received signal quality is less than a predetermined signal quality even if said at least one currently transmitting base station makes the transmission at predetermined maximum transmission power value.

16. (previously presented): The mobile communication control method according to claim 1, wherein each of the active set of base stations transmits a dedicated control signal to the mobile station and wherein only each of said at least one transmitting base station transmits dedicated data signal to the mobile station.

17. (previously presented): The mobile communication control method according to claim 1, further comprising notifying the active set of base stations of the determined at least one transmitting base station.

18. (currently amended): The mobile communication system according to claim 6, wherein said mobile station notifies the determined result to said active set base stations.

19. (previously presented): The mobile station according to claim 11, further comprising means for notifying the determined result to said active set of base stations.

20. (previously presented): A mobile communication control method comprising:

receiving by a mobile station pilot signals transmitted from a plurality of base station;

forming a link between the mobile station and base stations from which the received pilot signal is above a predetermined threshold, thereby forming an active set of base stations;

measuring signal quality of the pilot signal transmitted from each of said active set of base stations;

estimating state of transmission power value of a transmitting base station; and

determining at least one new transmitting base station based on the measured result and the state of the transmission power value of the transmitting base station,

wherein each base station from the active set of base stations becomes the at least one new transmitting base station depending on the transmission power value of the transmitting base station.